Lessons Learnt

"Index Insurance for the Agricultural Sector in Central America: Honduras"

As part of an engagement between the International Research Institute for Climate and Society of Columbia University (IRI), the CGIAR Research Program on Climate Change, Agriculture & Food Security (CCAFS), Zamorano Agricultural University and the Ministry of Agriculture and Fisheries (SAG), the *Index insurance for the agricultural sector in Central America* project is a collaborative effort for identifying and implementing producer-driven, development-focused processes for generating climate risk solutions.

Many farmers have opportunities to take productive risks, such as taking a loan to buy higher quality seeds. However, the risk of failed crops can prevent them from investing in new technologies. Working with these farmers, project stakeholders identified index insurance as the tool that could present marginalized farmers with the opportunity to transfer enough risk for them to take productive chances. Through participatory processes, the IRI has been able to connect the science, the experts on-the ground and the producers' experiences to design a drought index insurance product that is in line with the end-users' needs, while providing insurance companies with new market opportunities.

Beyond a pilot

Implementing this new technology will be a precedent for most other countries in the region. In Central America there are to date no initiatives that have reached sustainable scales with large widespread impacts, mostly due to information and technical design limitations, those that are surpassed through this initiative. More specifically, through simple design strategies focused on solving climate related risks faced in specific vulnerable periods for the crops in question and using satellite information to capture these risks, present very high scaling opportunities. Thus, the commercial implementation of this product in Honduras will be an example for other countries in the region to assimilate such technologies that can help improve smallholder farmer livelihoods and food security.

Taking into account conservative technology adoption rates, the pilot product designed in Honduras with a focus on basic grains, is expected to reach more than 70,000 farmers, of the approximate 350,000, through its scaling process. While at a regional level there are more than 2 million basic grain farmers, which have the potential of benefiting from the technologies piloted in Honduras.

This document highlights key lessons learnt throughout the capacity building and index insurance design processes, working with and connecting different local partners and end-users, leading to successful local implementation efforts.

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Public-private partnerships (and formal collaborations)

The public sector can provide incentive and impetus for a new insurance modality. National policy programs interested in rural development need to be able to identify and target farmer groups. Aligning with existing rural development and adaptation initiatives ensures that risk transfer mechanisms are built and in synch with existing governmental risk mitigation strategies. For example, building sustainable subsidy programs can provide the poorest farmers increased access to insurance programs. A program of this nature can help reduce the costs to develop and implement index insurance technologies, which might be too costly for smallholder farmers to cover themselves.

There are opportunities to coordinate with other government agencies working in the rural sector through seed programs and rural financing initiatives.
Farmers are also given information to implement best practices through capacity building efforts, such as the *Local Technical Agroclimatic Committees,* which in Honduras are driven by a collaboration between CCAFS and SAG, providing them with the tools to better understand risk reduction before transfer.

In Honduras, these types of programs are carried out by SAG-DICTA, which is a branch of the ministry (SAG). Through the existing collaboration with the climate change and risk reduction unit at SAG, relationships were built to define the potential of incorporating risk transfer mechanisms into existing government programs focusing on financial tools for the agricultural sector e.g. 'Cajas Rurales'.

It is important to understand existing restraints in the process of building public-private partnership. One key consideration is that ***government bodies are cyclical and will be influenced by election results or other policy related processes***. To avoid setbacks in time sensitive processes and ensure that an initiative's efforts transcend cyclical government changes, it is important to understand and build a strategy that ***focuses on a relationship at an organizational and not an individual level***. For example, through *MoUs* or other mechanisms that formalizes the government agency involvement beyond the appointed officials' interest. Other government agencies or ministries might have intertwined mandates for the ministry of agriculture. In the process of formalizing a public-private sector partnership, the initiative should carry out an initial inclusive process. For example, another ministry aside from the ministry of agriculture might have the mandate to work on rural financing (while the agricultural ministry focuses only on technical support to farmers and seed programs,) and the initiative should assess the best way to ***formalize a relationship that takes into consideration relevant government mandates and existing policies***.

Beyond, working through a public-private sector partnership, this initiative showed that ***involvement of local insurance regulatory government bodies is an essential component throughout the life of the product***. We learned that when local regulatory bodies actively participate in the initiative, attending capacity building efforts- focusing on technical as well as implementation components and feedback processes, the product's local relevance and technical complexities can become 'second-nature.' Successfully working with the regulators in this fashion ***can lead to timelier and less iterative approval processes***. Since index insurance is a 'new' technology in many developing countries, relevant actors need to be familiarized and understand the underlying concepts and processes to more confidently support its innovative introduction into the insurance market. It is essential to create an atmosphere where there is a demand generating from the people which will permit the project to come to fruition.

Private Sector Perspectives

The public-private partnership includes collaboration with the insurance and financial sector which allows for capacity building and creating interest in the local sector. ***Capacity building generates business opportunities with realistic expectations and can change the business as usual paradigm.*** This modality is influenced and driven by demand through documented research which creates confidence in the product and can reduce potential losses. The private sector takes into account the needs and interest of farmers and other associations to build the insurance product based on identified opportunities. Understanding the particular context of where the insurance product is being generated can help establish a business plan that better fits their decision-making processes. These processes can be influenced by capacity building that focus on topics such as, climate information and usability and gaps in financial education.

Academic Research Lessons

The academic sector is crucial in the formation of the index insurance. Local research organization and institutions, help provide adequate local context which helps build index insurance products that work and generate solutions for the local farmers; for example, non-commercial research pilot can be adapted to farmer realities based on the institution's knowledge of farmers and their operations. Incorporating capacity building efforts at the student level increases awareness and local interest to help develop innovative climate risk management solutions from within the country. This could be achieved through discussions and students' research projects.

Research initiatives can foster more successful pilot projects (or dry-run) to help build confidence in the product for interested insurance companies and regulators. It is important to understand how the proposed model is effective, before committing resources to the commercial implementation. From this project, stakeholders were also able to identify necessary adjustments to the initial product design that will help better assess the risk of drought, as experienced during the 2015 agricultural season in Honduras. We also learned that when offered the option of insurance to individual famers, they generally bought more insurance. The experimental activities allowed project partners not only to gauge and build demand for index insurance among basic grains producers in Honduras, but also to identify refinements in alignment with producers' preferences and experiences, so that the commercial product can reach scale responsibly and sustainably.

Projects like the Index Insurance for the Agricultural Sector in Central America leaves a mark on capacity building of local research organizations and universities.

Experiences like participation in workshops with local farmers to develop farmer-based index insurance products is invaluable to local universities like Zamorano. Professors, instructors and staff gained experience on experimental games and index insurance, which is a rare opportunity for staff of universities in developing countries. This knowledge is passed on to students through in-classroom training and student research projects. This know-how is not only focalized in the specific index worked on with the project but transcended to other indexes as it was the case passing from a rainfall satellite based index to a vegetative index insurance product. ***All the previous work increases awareness and local interest to develop innovative climate risk management solutions from within the country.*** In addition, insurance companies find competent professionals to hire for their organizations in this emerging insurance market.